


PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

BEST AVAILABLE COPY

Applicant's or agent's file reference P 2003 00994 WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/DK2004/000438	International filing date (<i>day/month/year</i>) 21.06.2004	Priority date (<i>day/month/year</i>) 20.06.2003
International Patent Classification (IPC) or both national classification and IPC B65B9/15		
Applicant SEELEN A/S et al.		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 4 sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>

Date of submission of the demand 11.04.2005	Date of completion of this report 20.09.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Vigilante, M Telephone No. +31 70 340-2902



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/DK2004/000438

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-14 as originally filed

Claims, Numbers

1-11 received on 11.04.2005 with letter of 08.04.2005

Drawings, Sheets

1/15-15/15 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☒ the claims, Nos.: 12
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/DK2004/000438

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-11
Inventive step (IS)	Yes: Claims	
	No: Claims	1-11
Industrial applicability (IA)	Yes: Claims	1-11
	No: Claims	

2. Citations and explanations

see separate sheet

BEST AVAILABLE COPY

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/DK2004/000438

BEST AVAILABLE COPY

Re Item V.

1. Reference is made to the following documents :

- D1: EP-A-0 652 156 (TEE PAK INC) 10 May 1995 (1995-05-10)
- D2: US-A-5 467 576 (HENDRIKS IVO G) 21 November 1995 (1995-11-21)
- D3: US-A-3 798 872 (CHERIO V ET AL) 26 March 1974 (1974-03-26)

2. The document EP0652156 is regarded as being the closest prior art to the subject-matter of independent claims 1 and 7 and discloses (the references in parentheses applying to this document):

a method of packaging at least one object in film (23), which film is tubular and preferably made of plastics, wherein the method comprises that a piece of the film is seized from a first free end (75) and a number of wrinkle-shaped folds (D) are formed, following which the piece is processed to bag-shape by welding of the film (H) transversally of its longitudinal direction for forming an at least partially closed end, and cutting it off (136) the remaining part of the film, following which the bag-shaped film with folds is arranged to receive the object (141), whereby that said bag-shaped film is transferred to a dispenser device (72) on which the film (23) is arranged following which the bag-shaped film (23) is left exteriorly on the dispenser device (72), whereby the object (141) is moved out said dispenser device (72) towards the closed end (H) of the film in such a manner that the film (23) is gradually pulled off the dispenser device (72) and the object (141) is at least partially packed therein, wherein after leaving the bag-shaped film (23) on the dispenser device (72) a subsequent bag-shaped film is prepared for a subsequent object.

Thus D1 shows all the features of claim 1 which is therefore not new as defined in the regulations (Rule 64(1)-64(3) PCT).

2.1 A similar novelty objection against present independent claim 1 can be raised on the basis of each of the documents D2 (see the whole document) and D3 (see especially column 3, line 50 - column 4, line 67, figures 1-20).

2.2 Documents D1-D3 further discloses the features of independent claim 7 which is therefore, mutatis mutandis, also not new.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/DK2004/000438

3. Dependent claims 2-6, 8-11 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).

BEST AVAILABLE COPY

1. A method of packaging at least one object (16) in film (1), which film (1) is tubular and preferably made of plastics, wherein the method comprises that a piece of the film (1) is seized from a first free end, and a number of wrinkle-shaped folds are formed, following which the piece is processed to bag-shape by welding of the film (1) transversally of its longitudinal direction for forming an at least partially closed end (14), and cutting it off the remaining part of the film, following which the bag-shaped film with folds is arranged to receive the object (16).

characterized by, that said bag-shaped film is transferred to a dispenser device (8) on which the film (1) is arranged following which the bag-shaped film (1) is left exteriorly on the dispenser device (8), whereby the object (16) is moved out of said dispenser device (8) towards the closed end (14) of the film in such a manner that the film (1) is gradually pulled off the dispenser device (8) and the object (16) is at least partially packaged therein, wherein after leaving the bag-shaped film (1) on the dispenser device (8) a subsequent bag-shaped film is prepared for a subsequent object.

2. A method according to claim 1, wherein the film (1) comprises a first end (10) which is preferably perpendicular to the longitudinal direction of the film (1), and wherein the method at least comprises use of means for handling the film, an elongate holder device (4) configured for arranging a piece of film (1), at least two seizer elements (2) adapted for cooperating with each other for seizing and handling film (1), means for welding and cutting (6) off the film and said dispenser device (8) configured for receiving and dispensing, respectively, a prepared piece of film (1), and means for moving the object interiorly through the dispenser device, said seizer elements (2) being configured for receiving and folding a piece of film, and wherein the method comprises that:

- the film (1) is arranged to enshroud the holder device (4) and with its first end (10) at a first end (12) of the holder device (4), wherein the first end (10) of the film (1) is seized with the seizer elements (2);
- following which the seizer elements (2) are moved essentially longitudinally of the holder device (4) towards its opposite end and completely or partially towards this end in such a manner that the film (1) is arranged in folds on the seizer elements (2);

Deleted: a

- following which the film (1) is secured by the seizer elements (2) and moved from the holder device (4) and across the dispenser device (8);
- during which movement the folded film (1) is processed to bag-shape on its way, said film (1) being – at a point after the folds and opposite the first end of the film – welded and cut off, whereby a free and at least partially closed end (14) of the film (1) is formed, which closed end (14) is thus arranged opposite the first end of the film (1);
- following which the seizer elements (2) are released from the film (1), whereby the folded film (1) is left exteriorly on the dispenser device (8);
- and following which the object (16) is moved out of the dispenser device (8) towards the closed end (14) of the film (1) and on in such a manner that the film (1) is gradually pulled off the dispenser device (8) and the object (16) is at least partially packaged therein.

3. A method according to claim 2, wherein the method is intended for packaging compressible objects (16), and wherein the dispenser device (8) expands the film (1) following receipt thereof, whereby the film (1), when pulled off the dispenser device (8), contracts around the object (16).

4. A method according to claim 2 or 3, wherein the method is used for successively packaging a series of objects (16) or a series of portions of objects (16), wherein the method comprises that, after a piece of film (1) has been folded and processed to bag-shape, a new first end (10) is formed in connection with the cutting off, said cutting off being accomplished in a position between the holder means and the dispenser device (8).

5. A method according to claim 4, wherein the method comprises that the remaining film is pulled back across the holder means, whereby the new first end of the film (1) is arranged at the first end of the holder means.

6. A method according to any one of claims 1-5, wherein the first end of the film is closed (14) following packaging of the objects (16), said closing procedure preferably comprising tightening by string or welding.

BEST AVAILABLE COPY

7. A system for exercising a method according to any one of claims 1-6, wherein the system comprises means for handling tubular film (1), an elongate holder device (4) configured for arrangement of a piece of film (1), at least two seizer elements (2) adapted cooperating with each other for seizing and handling film (1), means for welding and cutting (6) off film, and a dispenser device (8) configured for receiving and dispensing, respectively, a prepared piece of film (1), and means for moving the object (16) through the interior of the dispenser device (8), said seizer elements (2) being arranged for receiving and folding a piece of film (1), wherein the system is configured for a piece of film (1) to be configured with a number of folds and processed to bag-shape which is suitable for being arranged on the dispenser device (8); and wherein the system is configured for objects (16) to be packaged by being moved towards a bottom (14) of the bag-shaped film and gradually on in such a manner that the film will gradually be released from the dispenser device (8)

characterized by, that the seizer elements (2) are mounted to a travelling carriage (26) which, after releasing the bag-shaped film from the dispenser device (8), transfers the seizer elements (2) back to the holder device (4) where a subsequent tubular film is processed to a bag-shaped for a subsequent object.

8. A system according to claim 7, wherein the dispenser device (8) is configured to be able to expand a piece of film (1).

9. A system according to claim 7 or 8, wherein the expanse of the dispenser device (8) is shorter than the object or objects (16) to be wrapped.

10. A system according to any one of claims 7-9, wherein the holder means are journaled on rollers (20) and configured such that the tubular film (1) is able to travel between the rollers (20) and the holder means for enshrouding the holder means.

11. A system according to any one of claims 7-10, wherein the system comprises means for storing film on a roller supply, and is configured for film (1) to be advanced to the holder means, and wherein the film (1) is tubular either from the beginning or wherein the system

is configured for film (1) to be continuously shaped and welded for achieving the tubular configuration during its advancement to the holder means.

Deleted: §
12. Use of a method or a system according to any one of the preceding claims for packaging stacked boards, including gypsum boards, or for packaging insulation material, including preferably wool, mineral wool, glass wool or some other type of fibre-based mineral or organic material. ¶

BEST AVAILABLE COPY